

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D117-837 REV. B AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D117-837 REV. 1
REF. TCCA STC: SH13-22
REF. FAA STC: SR03353NY

1.0 Purpose

The purpose of this Dart Service Instruction (DSI) is to provide instructions to relocate and replace the basket strut assembly on the D117-837-011 Basket Installation for improved reliability in service. The new D5203-041 Strut Assy, D5204-1 Bracket and the D5205-1 Bracket replace the old D4794-043 Strut Assy and D4911-1/-5 Brackets for customers who have D117-837-011 Heli-Utility-Basket at CHG 002 thru CHG 004. The D5204-1 Bracket attaches to the fwd crosstube hardpoint bolt in order to move the drag load away from the aircraft skin structure.

2.0 Permanent Removal of D4911-1/-3/-5 Brackets

- 2.1 For D117-837-011 Heli-Utility-Baskets at CHG 003, remove and discard the D4794-043 Strut Assy by disconnecting 2x MS17984-C405 quick release pin.
- 2.2 For D117-837-011 Heli-Utility-Baskets at CHG 002, remove and discard the D4794-041 Strut Assy by disconnecting AN4-7 bolts and associated Hardware from both ends of D4794-041 Strut Assy.
- 2.3 For D117-837-011 Heli-Utility-Baskets at CHG 003. Discard the D4911-3 Bracket from airframe and reinstall 2x MS27039-1-08 Screws and 2x NAS1149F0332P washers.
- 2.4 For D117-837-011 Heli-Utility-Baskets at CHG 004. Discard the D4911-5 Bracket from airframe and reinstall 4x MS27039-1-08 screws and 4x NAS1149F0332P washers.
- 2.5 Repeat steps 2.3 to 2.4 for opposite side of the aircraft if the aircraft has been configured with basket provisions on both sides.
- 2.6 Remove the D4911-1 Bracket and associated hardware from the basket.
- 2.7 Inspect the underlying aircraft structure for damage. If cracking/buckling of the aircraft structure is observed, repair per BK117 Aircraft Maintenance Manual Chapter 21-1.

3.0 Installation of D5203-041 Strut Assy (RH strut installation shown, LH similar)


- 3.1 Remove the RH fwd crosstube aft p/n 105-50001.33 stepped washer (item 380) and replace with D5204-1 Bracket and NAS1149F0832P washer. Reinstall nut and torque per Aircraft Maintenance Manual. Reinstall split pin per Figure 1.
- 3.2 Install D5205-1 Bracket and associated hardware at basket rib shown in Figure 3.
- 3.3 Install D5203-041 Strut Assy onto D5204-1 Bracket and D5205-1 Bracket by connecting 2x MS17984-C405 Quick Release Pins as shown in Figures 2 and 3. Make adjustments to the AN665-34R threaded clevises and lock with NAS509-4C jam nuts. Secure the NAS509-4C jam nuts using lock wire per AC 14.13 or MS33540. After adjustment, use lockwire in the hole of the AN665-34R clevises to check for proper engagement of threads. It is acceptable to flip MS17984-C405 Quick Release Pin orientation as shown in Figures 2 and 3 to facilitate D5203-041 Strut Assy installation.
- 3.4 Repeat step 3.1 for opposite side of the aircraft if the aircraft is to be configured with basket provisions on both sides.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 15.01.06
CERT. NO.: SH13-22
ISSUE NO.: 1

A	NEW ISSUE	RF	15.01.06
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	HS	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9716	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		STRUT RELOCATION	NTS
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4.0 Parts List

For D117-837-011 Heli-Utility-Baskets @ CHG 005, the Parts List in ICA-D117-837 and IIN-D117-837 (as modified per DSI 9706 Rev. A) should be updated as follows:

Qty -011	Part Number	Description
X	D117-837-011	HELI-UTILITY-BASKET, LH/RH
1	D4784-011	BASKET ASSEMBLY, HEAVY DUTY, LH/RH
4	D5106-041	BRACKET ASSY
1	D5203-041	STRUT ASSY (REPLACES D4794-043)
2	D5204-1	BRACKET
1	D5205-1	BRACKET
2	AN3-11A	BOLT
4	AN4-12A	BOLT
2	NAS1149F0332P	WASHER
8	NAS1149F0416P	WASHER
2	NAS1149F0832P	WASHER
2	MS21042L3	NUT
4	MS21042L4	NUT

For D117-837-011 Heli-Utility-Baskets @ CHG 002 thru CHG 004, the DSI 9716-011 Strut Relocation Kit is available from Dart.

Qty -011	Part Number	Description
X	DSI 9716-011	STRUT RELOCATION KIT
1	D5203-041	STRUT ASSY (REPLACES D4794-043)
2	D5204-1	BRACKET
1	D5205-1	BRACKET
2	AN3-11A	BOLT
2	NAS1149F0332P	WASHER
2	NAS1149F0832P	WASHER
2	MS21042L3	NUT

5.0 Weight & Balance


This DSI has a negligible effect on Weight & Balance

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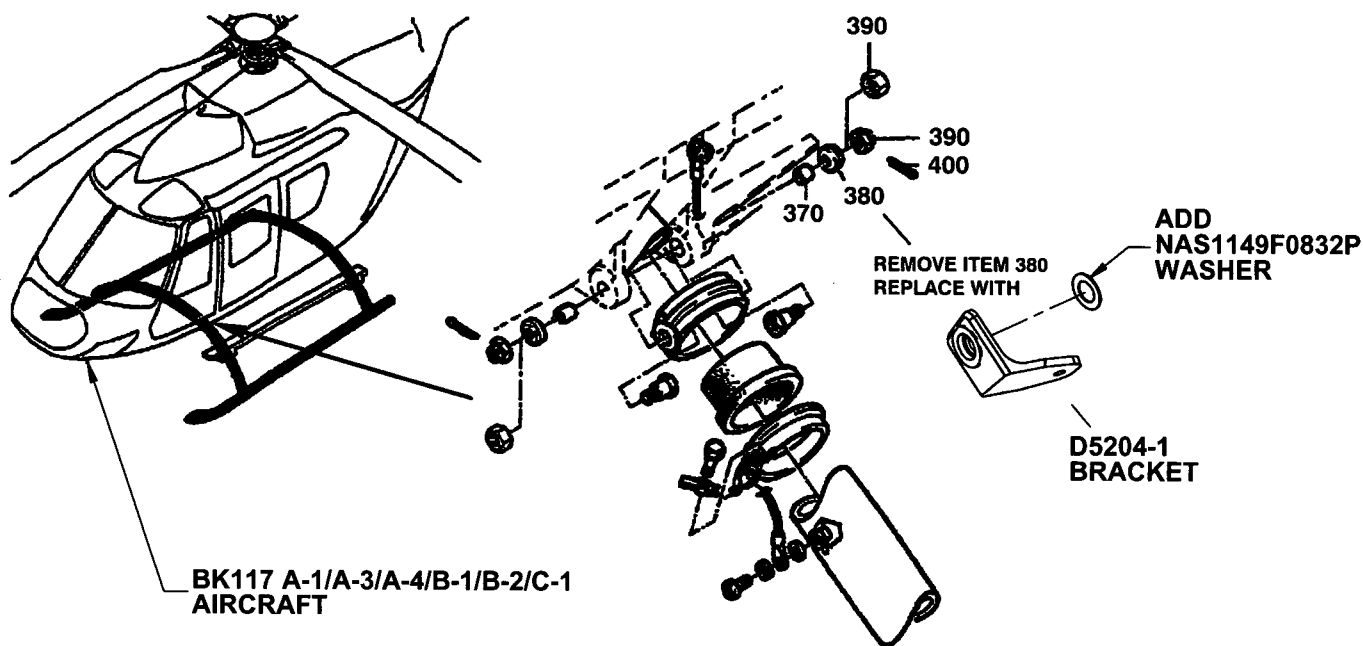


FIGURE 1. D5204-1 BRACKET INSTALLATION
(LH INSTALLATION SHOWN, RH OPPOSITE)

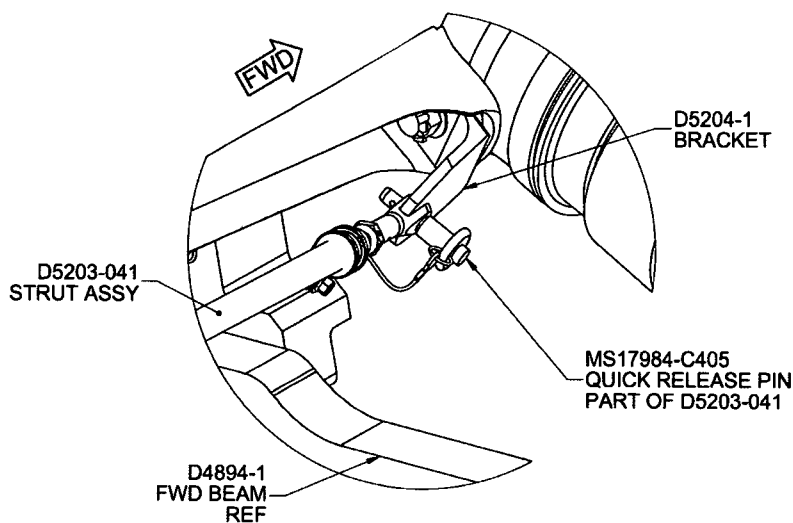


FIGURE 2. D5204-1 BRACKET INSTALLATION
(RH INSTALLATION SHOWN, LH OPPOSITE)
(BASKET & AIRCRAFT SKIN NOT SHOWN FOR CLARITY)

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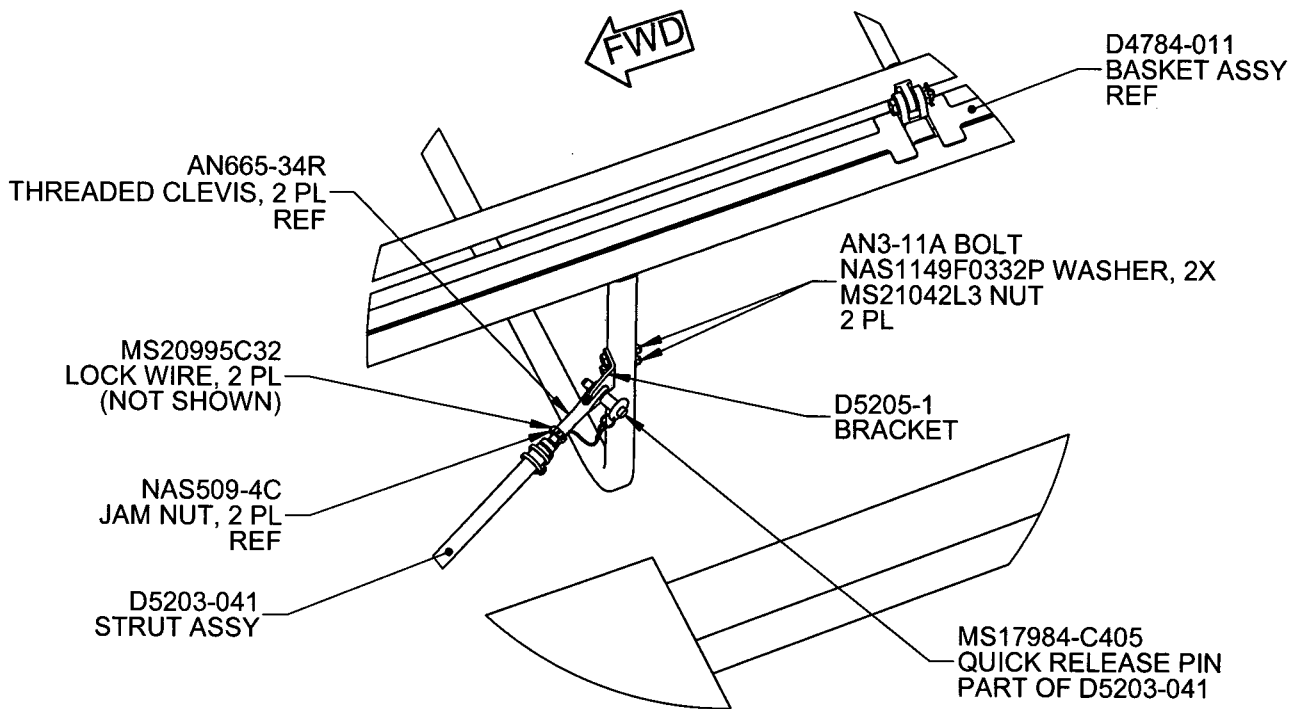


FIGURE 3. D5205-1 BRACKET INSTALLATION
(RH INSTALLATION SHOWN, LH OPPOSITE)

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